

## **Passenger Rail**

Currently, California's passenger rail system combines intercity, commuter, and urban rail. In the future, high speed rail plans to join these existing rail types to enhance the State's passenger rail system. While Caltrans assumes different roles in the operation of the many passenger rail lines in California, the State strives to make the passenger rail system as "seamless" as possible with excellent connectivity to other transportation systems. Designing for connectivity enters into virtually every aspect of operations, marketing and capital planning. The California State Rail Plan describes the overall vision for the State's intercity and commuter rail systems which (along with freight rail) share the same infrastructure, generally owned by private railroads. Urban rail services (such as the Los Angeles County Metro Rail and BART) operate on separate tracks and are locally controlled and funded, so they are not covered in the State Rail Plan. However, to further the implementation of a safe, integrated, multi-modal transportation system, it is essential that the intercity and commuter rail systems be well integrated with the urban transit rail and bus systems.

### **Existing Intercity Rail Service**

Intercity passenger rail service is a component of the State's overall transportation system and operates between several regions of the state. In California, Amtrak operates all State-supported intercity rail service. Caltrans provides operating funding for the three Amtrak California routes, the Pacific Surfliners (San Diego to San Luis Obispo), the San Joaquins (Bay Area/Sacramento to Bakersfield), and the Capitol Corridor (San Jose to Auburn). In addition, as part of its national intercity rail system, Amtrak funds and operates four long distance train routes that link California to other states. These routes include the Coast Starlight (Los Angeles to Seattle), California Zephyr (Emeryville to Chicago), Southwest Chief (Los Angeles to Chicago), and the Sunset Limited (Los Angeles to New Orleans). The State-supported routes connect with each other and with Amtrak's national intercity passenger rail network. Many passengers use State-supported routes as part of a longer rail trip. Coordination of schedules generates additional ridership and can improve overall efficiency. See map for routes.

### **Existing Commuter Rail Services**

Commuter rail operates primarily within a single region of the State, serving regional and local transportation needs. Because commuter rail serves local and regional transportation needs, these services are planned and administered by local and regional transportation agencies. Various sources of funding are available at the local, state, and federal levels. Some capital funding is provided by the state through the State Transportation Improvement Program, and other sources, but operating funding is provided by the local and regional agencies. California's existing commuter routes are Coaster (San Diego to Oceanside), Metrolink (Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties), Caltrain (San Francisco-Gilroy) and Altamont Commuter Express (ACE) (Stockton to San Jose). See map for routes.

## Existing Streets and Highways

Caltrans works to ensure that the trains are well connected to streets and highways through proper design of stations and signage, including pathfinder signs on local streets and roads and State highways that guide passengers to Amtrak stations.

## Trends and Challenges

Caltrans' vision for California's intercity rail system includes three key elements:

Provide a rail transportation alternative to other travel modes; provide relief to highway and air transportation congestion; and improve air quality, conserve fuel, and contribute to efficient and environmentally superior land use.

The box at the right describes specific goals for the State's intercity passenger rail system vision.

One key challenge for State-supported intercity rail is adequate and predictable funding for capital projects needed to maintain and expand the system.

The only ongoing capital funding source is a limited portion of the State Transportation Improvement Plan (STIP) funds. The State's ten-year \$4.03 billion capital program through fiscal year 2017-18 for the three existing State-supported intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor) and for new routes/extensions represents a program based on program needs, and not on funding expectations. Full implementation of this capital program will require major Federal funding. The State applied for Federal stimulus funds being made available in 2009-10 and received about \$100 million in funding. Future grant cycles are anticipated.

### Intercity Passenger Rail Goals

- Expand capacity on existing routes
- Reduce train running times
- Improve equipment, stations, and facilities
- Enhance multi-modal connectivity
- Increase fare box ratio
- Improve safety
- Implement new cost effective routes

## Proposed Intercity and Commuter System Description

As part of its 10-year intercity rail plan, the State proposes to increase service frequencies on all three existing intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor), and to add three new extensions of existing State-supported service:

- 1) Expand service from San Francisco to San Luis Obispo and Los Angeles as part of the Pacific Surfliners
- 2) Expand service from Sacramento to Redding
- 3) Expand service from Sacramento to Reno
- 4) Initiate service from Los Angeles to Indio (Coachella Valley).

The four commuter rail agencies (Coaster, Metrolink, Caltrain, and ACE) also have plans for expansion of service. In addition, there are three planning initiatives for commuter rail. The Southern California Association of Governments (SCAG) has initiated a study of commuter rail service for Ventura and Santa Barbara counties. Sonoma Marin-Area

Rail Transit District proposes service between Cloverdale and the Larkspur Ferry Terminal. Six agencies have partnered to develop a service plan for a new regional commuter rail service in the Auburn and Oakland urban corridor, which would be integrated with the Capitol Corridor. See map for proposed routes.

### **Proposed High-Speed Rail Service Description**

In 2008, the State Legislature approved and Governor Arnold Schwarzenegger signed AB 3034 (Galgiani), placing a \$9.95 billion bond measure for high speed rail on the November 2008 ballot. Proposition 1A asked California voters to approve a down payment on construction of the high-speed train line, led by the California High Speed Rail Authority (Authority). The bond measure passed and the Authority is currently working on obtaining environmental clearance on project sections.

As reported by the Authority, the major sections of the proposed high speed train system include: Los Angeles to Orange County, Los Angeles to Bakersfield, Bakersfield to Fresno, Fresno to Merced, Merced to San Jose, and San Jose to San Francisco. Subsequent sections of the system would extend north to Sacramento and south to San Diego. See map for proposed routes. The system will be built, whenever possible, along or adjacent to existing rail transportation facilities instead of creating new transportation corridors. In addition, in most major cities, the high-speed train station will be developed in conjunction with existing rail transportation hubs to produce the most efficient linkages to local and regional transit systems. The Authority is working on a timeline that would see a complete high-speed train system in place by 2030; subsequent sections would be constructed after that time.

Proposition 1A will provide \$9 billion in state general obligation bonds that require other federal, state, local, and private financing to be secured before construction can proceed. Another \$950 million included in the bond measure will be used to finance capital improvements to commuter, intercity rail, and transit lines in order to connect existing infrastructure to the high-speed rail system. In February 2010, the Authority received \$2.25 billion in Federal stimulus funds.

The Authority and regional partners are proposing to develop a dedicated regional rail corridor through the Altamont Pass and the Tri Valley area capable of supporting intercity and commuter rail passenger services. This project is a separate corridor project from the statewide high-speed train system. Project-level environmental review is currently underway.

### **Other Proposed High Speed Rail System Descriptions**

The DesertXpress is a proposed new high-speed, steel wheel on rail double track interstate passenger rail line. This new line, being proposed by a private consortium, would run 190 miles between Victorville, California and Las Vegas, Nevada. It would run primarily at grade but would be completely grade-separated from all streets and

highways. The federal environmental impact statement (EIS) process is currently underway for this route.

Two high speed rail Maglev projects (Southern California Maglev Project and the Las Vegas–Anaheim Maglev Project) are also being proposed. Maglev technology uses magnetic forces to lift, propel, and guide a vehicle over a guideway. These two projects have significant hurdles to overcome. Their sponsors will need to complete engineering work and environmental documentation to further the initial concept design plans and a principal funding source remains to be identified.

*Source: California Rail Plan 2007-08 to 2017-18*

*<http://www.dot.ca.gov/rail/go/dor/california-state-rail-plan/index.cfm>*

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*Source: California High-Speed Train Business Plan*

*<http://www.cahighspeedrail.ca.gov/library.asp?p=8200>*

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# California Intercity and Commuter Rail Network

(including connecting bus service)

## Current System as of February 2010





# California Intercity and Commuter Rail Network

## Proposed Intercity, Commuter and High Speed Rail Services

**Proposed Frequency Increases on Existing Intercity Corridors**

Corridor	2010	2018
<b>Pacific Surfliners</b>		
San Diego-Los Angeles	11	13
Los Angeles-Goleta	5	6
Goleta-San Luis Obispo	2	3
<b>San Joaquins</b>		
Oakland-Bakersfield	4	5
Sacramento-Bakersfield	2	3
Oakland-Stockton		2
<b>Capitol Corridor</b>		
San Jose-Oakland	4	16
Oakland-Sacramento	12	18
Sacramento-Roseville	1	10
Roseville-Auburn	1	4

**LEGEND of PROPOSED RAIL SERVICES**

**Intercity Rail Services**

- (A) Sacramento – Redding
- (B) Auburn – Reno
- (C) San Luis Obispo – San Francisco
- (D) Los Angeles -Indio

**Commuter Rail Services**

- (E) Auburn – Oakland Commuter
- (F) Sonoma Co. – Marin Co. (SMART)
- (G) ACE Proposed Extensions (4 lines)
- (H) Dumbarton Rail Corridor
- (I) Catrain Salinas Extension
- (J) Santa Barbara – Ventura Co. Commuter
- (K) Metrolink Santa Paula Branch
- (L) Metrolink Perris Extension

**High Speed Rail**

- ① CA High-Speed Rail – Phase 1
- ② CA High-Speed Rail – Phase 2 (3 lines)
- ③ Altamont Corridor Project
- ④ Desert Express – Phase 1
- ⑤ Desert Express – Phase 2

**CURRENT SERVICE LEGEND**

**Intercity Services**

- Capitol Corridor®
- San Joaquin®
- Pacific Surfliner®
- Amtrak Thruway Motorcoach Services (most intermediate stops not shown)
- Amtrak Interstate Rail Routes

**Commuter Services**

- Caltrain
- ACE
- Metrolink
- Coaster
- BART

**Other Symbols**

- City w/ Rail Station or Bus Stop
- Major Rail Transfer or Rail Terminal City

California Department of Transportation  
Division of Rail – acm.v3  
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0 25 50 75 100 miles  
0 25 50 75 100 km

